

Cortisol day curve

Information for patients

This leaflet answers some of the questions you may have about having a cortisol day curve. It explains the purpose of the test and what you can expect when you come to hospital. If you have any other questions or concerns, please speak to the doctors or nurses caring for you.

What is a cortisol day curve?

This test is done to measure the level of cortisol in your blood. Your blood cortisol level is tested at regular points to give an indication of cortisol production throughout the day.

Why do I need this test?

The adrenal glands are situated on top of both kidneys. They are responsible for producing cortisol, a hormone which is essential for health, and which is particularly important in stressful situations. This test is used to find out if you have an appropriate level of cortisol in the bloodstream.

This test is routinely used in those with current or previous cortisol excess, known as Cushing's disease, to assess disease or inform treatment.

What are the benefits?

This test measures the level of cortisol in your blood over a six hour period. It is important to measure several levels over a period of time to allow us to find out if the cortisol level is within an acceptable range. This test is used to assess disease or optimise treatment in patients that need medication to maintain normal cortisol levels.

What are the risks?

A cannula (tiny plastic tube) will be inserted into a vein in your arm or hand using a needle.

The cannulation process is similar to a blood test. Associated risks with cannulation or a blood test may include:

- multiple punctures to locate veins
- bleeding from puncture site
- bruising
- haematoma (blood build up under the skin)
- fainting or feeling lightheaded
- infection (a slight risk any time the skin is broken)
- phlebitis (inflammation of the vein)

Keeping pressure on the puncture site for a few minutes after the needle is removed will help to reduce bruising.

Are there any alternatives?

If appropriate, this test can be conducted over a four hour period, instead of a six hour period.

Do I need to prepare for my test?

You may eat and drink normally before the test.

If you are taking hydrocortisone tablets or any other steroid (for example, prednisolone or dexamethasone) **do not take these tablets on the day of the test**. On the day before the test do not take any steroid past 9pm. Do not use any steroid inhalers or creams on the day of the test or 12 hours before the test.

Apart from the medications mentioned above you can continue to take your other regular prescribed medications.

What happens before my test?

Before the test, we will take your blood pressure and the nurse will ask you about your regular medications.

What happens during my test?

A cannula (tiny plastic tube) will be inserted into a vein in your arm or hand using a needle from which blood samples will be taken for the duration of the test.

If you are having a six hour test, a cortisol level will be taken when the cannula is inserted and then every two hours for a six hour period. This is four blood samples in total.

If you are having a four hour test, a cortisol level will be taken when the cannula is inserted and then every two hours for a four hour period. This is three blood samples in total.

How long does the test take?

The test lasts for four or six hours. If you are having the six hour test you should expect to be in the unit for six and a half hours. If you are having the four hour test you should expect to be in the unit for four and a half hours.

What happens after my test?

Once the test is done the cannula will be removed and you will be able to go home.

Results will be reviewed by the endocrine team. They will either be sent to you by letter or, in some cases, discussed on the phone or with you at your next clinic appointment. We will also send a letter to your GP. This may take up to six weeks.

Contact

If you have any queries or concerns please contact the Programmed Investigation Unit (PIU).

Tel: 020 3299 3034 or 020 3299 1385. Opening hours: 8am to 6pm, Monday to Friday.

Sharing your information

We have teamed up with Guy's and St Thomas' Hospitals in a partnership known as King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at Guy's or St Thomas'. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between the hospitals.

Care provided by students

We provide clinical training where our students get practical experience by treating patients. Please tell your doctor or nurse if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

PALS

The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. The PALS office is located on the ground floor of the Hambleton Wing, near the main entrance on Bessemer Road - staff will be happy to direct you.

PALS at King's College Hospital, Denmark Hill, London SE5 9RS

Tel: **020 3299 3601**

Email: **kch-tr.palsdh@nhs.net**

You can also contact us by using our online form at **www.kch.nhs.uk/contact/pals**

If you would like the information in this leaflet in a different language or format, please contact PALS on **020 3299 1844**.